

Title (en)  
ARTICULATED ROBOT

Title (de)  
GELENKROBOTER

Title (fr)  
ROBOTS ARTICULE

Publication  
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Application  
**EP 94923081 A 19940805**

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Abstract (en)  
[origin: EP0666150A1] In a wrist structure for articulated robots, having a work clamping means affixed to a base portion (2) adapted to be turned around a vertical pivot (S-shaft) by an S-shaft driving motor (21) provided on a base (1); a first arm (3) which is a rotary portion (7) capable of being turned around a pivot (T-shaft), which extends perpendicularly with respect to the pivot (B-shaft) of the wrist (6), by a T-shaft driving motor (71) provided on a base portion of the arm (4); a first wrist link (63) which extends on an extension of the arm (4) fixed to the wrist (6), and which is fixed to the outer periphery (67) of the rotary portion (7); a second wrist link (64) fixed to an output shaft (73) of the rotary portion (7); a third wrist link (65) pin-connected to an end portion of the first wrist link (63) so that the third wrist link can be turned; a fourth wrist link (66) pin-connected to end portions of the second and third wrist links (64, 65) and extending in parallel with the first wrist link (63); and a work clamping means (81) fixed to the pivot pin of the third wrist link (65) are provided. A buffer means (9) is provided between the wrist (6) and the first wrist link (63) or second wrist link (64). This invention can provide a wrist structure having non-reinforced arms and a T-shaft driving motor of a small load, capable of being operated at a high speed and kept safe even when the work clamping means collides with an obstruction. <IMAGE>

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Cited by  
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